

Amendment
USSN 09/899,991

IN THE CLAIMS:

Please amend the claims to read as follows:

Claims 1-19 (canceled)

20. (Currently Amended) The hearing aid according to claim 41, wherein said test ~~managercontroller~~ is adapted to disconnect said input transducer from the signal path and to activate said probe ~~means~~ for determination of the signal parameter in order that the noise level generated by input circuitry of the hearing aid may be determined.

21. (Canceled)

22. (Currently Amended) The hearing aid according to claim 41, wherein said test ~~managercontroller~~ is adapted to compare the input from said probe with desired parameters in order to establish whether the hearing aid has a defect.

23. (Currently Amended) The hearing aid according to claim 2421, wherein said ~~second point is selected to achieve that the test signal generator is connected effect to effect~~ the emission by said output transducer of a sound signal.

24. (Currently Amended) A hearing aid comprising,
an input transducer for transforming an acoustic input signal into a first electrical signal,

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a signal path including a signal processor for processing the first electrical signal to produce a second electrical signal based on the first electrical signal,
an output transducer for converting the second signal into sound,
a probe for determining a signal parameter,
means for connecting said probe to a first point in said signal path,
a test managercontroller adapted to control a state of the hearing aid, to receive an input from said probe and to determine any defect in the hearing aid,
activation means for operator activation in order to cause said test managercontroller to initiate a test procedure,
a test signal generator controlled by said test managercontroller and adapted for injecting a test signal at a second point in the signal path, and
a filter bank with bandpass filters for deriving from the first electrical signal a set of bandpass filtered derivatives of the first electrical signal, wherein said processor is adapted to generate the second electrical signal by individual processing of each of the bandpass filtered derivatives of the first electrical signal and adding together the processed electrical signals to provide the second electrical signal, and wherein said test managercontroller is adapted to selectively connect said probe to the output of one of said bandpass filters.

25. (Currently Amended) The hearing aid according to claim 24, wherein said test managercontroller is adapted to connect said probe to the output of a bandpass filter tuned to

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pick the third harmonic of the output of said test signal generator for determination of harmonic distortion.

26. (Currently Amended) A hearing aid comprising
a telecoil input transducer for transforming an input signal into a first electrical signal,
a signal path including a signal processor for processing the first electrical signal to
produce a second electrical signal based on the first electrical signal,
an output transducer for converting the second signal into sound,
a probe for determining a signal parameter,
means for connecting said probe to a first point in said signal path,
a test managercontroller adapted to control a state of the hearing aid, to receive an input
from said probe and to determine any defect in the hearing aid,
activation means for operator activation in order to cause said test managercontroller to
initiate a test procedure, and
a test signal generator controlled by said test managercontroller and adapted for injecting
a test signal at a second point in the signal path, wherein said second point is selected to achieve
that the test signal effects the emission by said output transducer of a sound signal,
and wherein said output transducer is adapted to generate a magnetic field, that is picked
up by said telecoil input transducer.

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27. (Currently Amended) The hearing aid according to claim 41, wherein said test managercontroller is adapted to verify the gain of said signal processor.

28. (Currently Amended) The hearing aid according to claim 41, wherein said test managercontroller is adapted to verify the gain of said signal processor as a function of frequency.

29. (Currently Amended) The hearing aid according to claim 41, wherein said test managercontroller is adapted to verify the compression of said signal processor.

30. (Currently Amended) A hearing aid comprising
an input transducer for transforming an acoustic input signal into a first electrical signal,
a signal path including a signal processor for processing the first electrical signal to
produce a second electrical signal based on the first electrical signal,
an output transducer for converting the second signal into sound,
a probe for determining a signal parameter,
means for connecting said probe to a first point in said signal path,
a test managercontroller adapted to control a state of the hearing aid, to receive an input
from said probe and to determine any defect in the hearing aid,
activation means for operator activation in order to cause said test managercontroller to
initiate a test procedure, and

an adaptive feedback canceller for suppression of acoustic feedback, wherein said test managercontroller is adapted to verify the operation of said adaptive feedback canceller.

31. (Previously Presented) The hearing aid according to claim 41, wherein said activation means comprises a switch positioned at a housing of the hearing aid.

32. (Previously Presented) The hearing aid according to claim 41, wherein said activation means comprises an interface adapted to receive commands from a remote control device adapted to operate the hearing aid.

33. (Previously Presented) The hearing aid according to claim 41, wherein said activation means comprises an interface adapted to receive commands from a programming device adapted to program the hearing aid.

34. (Previously Presented) The hearing aid according to claim 41, wherein said activation means comprises an interface adapted to receive commands from a fitting device for the hearing aid.

35. (Previously Presented) The hearing aid according to claim 41, comprising a memory for storage of a reference value of a parameter.

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36. (Previously Presented) The hearing aid according to claim 41, comprising means for causing generation by said output transducer of a tone signal to alert the user that the hearing aid has a defect.

37. (Currently Amended) The hearing aid according to claim 36, wherein said test managercontroller is adapted to determining a specific type of defect, and comprising means for causing generation by said output transducer of a specific tone signal to alert the user that the hearing aid has a specific defect.

38. (Previously Presented) The hearing aid according to claim 41, comprising at least two switches in said signal path for the selective determination of signal parameters at respective points of said signal path.

39. (Previously Presented) The hearing aid according to claim 41, comprising at least two switches in said signal path for the selective injecting of test signals at respective points of said signal path.

40. (Canceled)

41. (Currently Amended) A hearing aid comprising an input transducer for transforming an acoustic input signal into a first electrical signal,

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a filter bank with bandpass filters for deriving from the first electrical signal a set of bandpass filtered derivatives of the first electrical signal,

a signal processor for individual processing of each of the bandpass filtered derivatives of the first electrical signal and adding together the processed electrical signals to provide a second electrical signal based on the first electrical signal,

an output transducer for converting the second signal into sound,

a probe ~~means~~ adapted for being selectively connected to the outputs of each one of said bandpass filters for determining a respective signal parameter,

a test signal generator adapted for injecting a test signal at a selected point in the signal path of the hearing aid extending through said input transducer, said signal processor and said output transducer,

a test ~~manager~~controller adapted to control a state of the hearing aid, to receive an input from said probe ~~means~~ and to determine any defect in the hearing aid, and activation means for operator activation in order to cause said test ~~manager~~controller to initiate a test procedure.

42. (Currently Amended) The hearing aid according to claim 23, wherein said test ~~manager~~controller is adapted to connect said probe to said input transducer.

43. (Currently Amended) The hearing aid according to claim 30, comprising a filter bank with bandpass filters for deriving from the first electrical signal a set of bandpass filtered

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derivatives of the first electrical signal, wherein said processor is adapted to generate the second electrical signal by individual processing of each of the bandpass filtered derivatives of the first electrical signal and adding together the processed electrical signals to provide the second electrical signal, and wherein said test managercontroller is adapted to selectively connect said probe to the output of one of said bandpass filters.

44. (Currently Amended) The hearing aid according to claim 30, wherein said test managercontroller is adapted to disconnect said input transducer from the signal path ~~and to activate said probe for determination of the signal parameter in order that the noise level generated by input circuitry of the hearing aid may be determined.~~